

JUSTIFICATION FOR SOLE SOURCE ACQUISITION
RECOMMENDATION AND DETERMINATION TO SOLICIT FROM ONE SOURCE
PR 4200362741

NASA, John F. Kennedy Space Center, will negotiate with OI Analytical, CMS Field Products for (2) modified IonCam 2020 Gas Chromatograph/Mass Spectrometer instruments. The total estimated cost of this effort is \$150,000 and the estimated turnaround time is 6 – 8 weeks ARO.

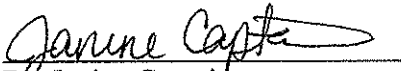
Pursuant to FAR 13.106-1(b), the acquisition of referenced are determined to be available from only one source. Competition is impractical for the following reasons:

Two volatile detection instruments consisting of a gas chromatograph with a mass spectrometer detector are required. Each unit consisting of a micro gas chromatograph, a miniaturized mass spectrometer, electron ionization source, vacuum system, IonCam Studio graphical user interface and Analyzer data analysis software, embedded PC, external power supply, and a protective travel case is estimated to have a total value of \$150,000.

This instrument is the only integrated compact GC-MS available that has demonstrated the ability to detect the low mass range (1 amu) AND collect an entire mass spectra at a rate of 10 hertz or faster. The unique non-scanning nature of the IonCCD detector is the only detection system for a mass spectrometer that can collect the entire mass spectrum with a high data acquisition speed (greater than 10 Hz). OI Analytical has several patents on this instrument. The company has expertise in gas chromatography and mass spectrometry with a range of instruments available for various analytical monitoring. OI Analytical is ISO 9001:2000 certified for the design, development, manufacture and service of analytical instruments.

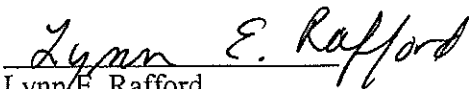
NASA HQ released an RFI for several areas within ETDD in May/June of 2010 (NASA Program Announcement Number NNH10ZTT002L). Within this call was a request for a volatiles detection instrument that was capable of detecting compounds of interest for a lunar mission (requirements from RESOLVE). Numerous responses were received from industry, university, and other NASA centers responding to the volatile detection request. The RFI responses were evaluated by a team within ISRU. Each response had a minimum of three reviewers who reached a consensus on the likelihood of each response being included in the program. Of these responses, there was only one compact instrument that was currently operational and could detect the species of interest. This instrument was the OI Analytical GC/MS, capable of scanning down to the low mass range and separating the like-mass components with the use of a GC. None of the other responses could detect and differentiate all of the species required for this mission.

Based upon the above, I hereby determine that the circumstances of the contract action deem only one source reasonably available for this acquisition. I certify that the supporting data presented in this justification are accurate and complete.


Dr. Janine Captain
Technical Officer

10/29/10
Date

I hereby certify that this justification is accurate and complete to the best of my knowledge and belief.


Lynn E. Rafford
Contracting Officer

11/01/10
Date